

GOVERNMENT OF ANDHRA PRADESH  
A B S T R A C T

Municipal Administration and Urban Development – Strategy on Surveillance, Information, Response, Analysis (SIRA) for Mosquito Control – Approved – Orders – Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (UBS) DEPARTMENT

G.O. Ms.No. 50

Dated: 10.02.2014  
Read the

following:

1. Govt.Memo No.1115/UBS/2014, dated 20.01.2014.
2. From C&DMA, Hyderabad Lr.No.9989/2007-H3, dated 22.01.2014.

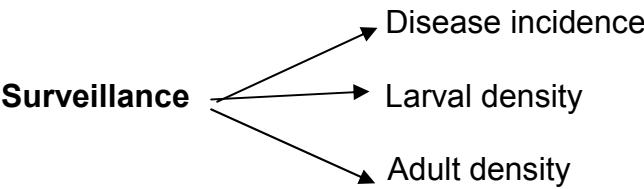
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**ORDER:**

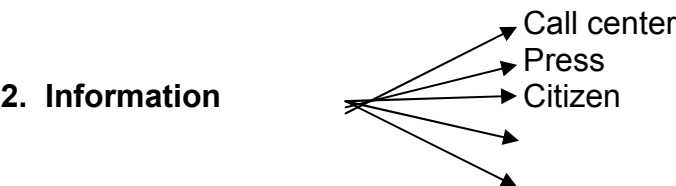
Mosquito elimination and malaria Control are important goals of Municipal Public Health Department. Typically Municipal Bodies do not follow a systematic approach to control mosquitoes and the method is more of crisis response to malaria and dengue epidemics to control mosquito at the breeding stage, Government have decided to issue a strategy called the Surveillance, Information, Response, Analysis (SIRA) model.

2. The strategy on Surveillance, Information, Response, Analysis (SIRA) to control Mosquitos is described below:

1. SIRA – components



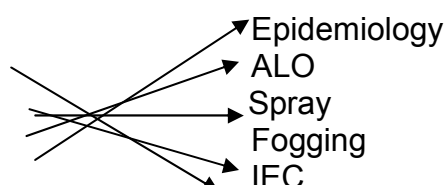
- Anti-larval operation (ALO) teams - each team consisting of of 1 Field Assistant (FA) and 2 Field Workers (FW) – will be deployed. All households are covered weekly to identify of domestic and peri-domestic breeding places and to do chemical treatment using appropriate larvicide in all breeding sources detected to be positive.
- All open breeding sources are identified and treated weekly by the ALO team which is recorded through wall stencils and survey registers.
- Triangulation teams study larval density and adult density from 10 houses (fixed points) based on previous hot spot data and selects another 10 houses (random points) to provide feedback to ALO teams.
- The team also verifies open breeding sources such as tanks, rivers, storm water drains, and open drains to provide information to the special work teams.
- Temporary water stagnation points, construction sites and roof tops are identified, especially during the monsoons.
- Assistant Entomologists correlate larvae density and adult density and analyze the reasons for breeding in various sources.
- Pin point program is prepared to cover all mosquito control units so as to cover all human dwellings, and open areas.
- Special operations are done to assess mosquito problem and eliminate mosquito breeding in identified areas.



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- Heads of circle, or a smaller geographical unit, will convene meetings every evening with the health officers, Assistant Entomologist, Deputy Project Officers and Veterinary Officers to review the work of anti-larval operation teams and special teams, including larval density and adult density analysis. Progress reports are submitted to the Commissioners and Chief Entomologist and Chief Medical and Health officer.
- The Commissioner in turn review daily with the Assistant Directors (Veterinary), Senior Entomologists and Project Officers and prepare reports on -
  - Information on Dengue, Malaria, JE and Chikungunya is collected from all major hospitals daily by the health officers and uploaded. Disease incidence is identified including the address and contact details to act on the information.
  - Hot spots are identified.
  - Press reports are analyzed to identify disease and mosquito menace hot spots and feedback on action taken.
  - Complaints (representations, call centre, control room, telephone, E. mail and web site) and water stagnation points are analyzed and information disseminated.
  - Feedback is obtained from elected representatives such as Corporators, Ward Committee Members, Area Sabha Representatives, resident welfare associations and any other organizations.

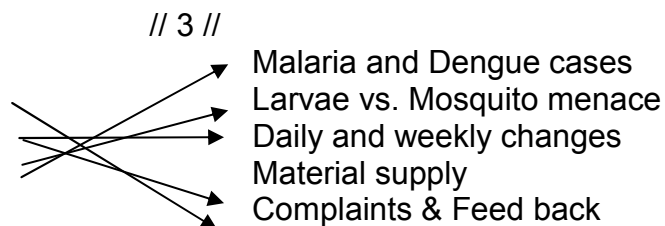
### 3. Response



- After identification of the hot spots, analysis of citizen complaints, press reports, case reports, following responses are undertaken.
  - Pig catching and segregation is done by veterinary wing in hot spot localities on the same day.
  - Outreach program is taken up by the Community Development Officer and Slum Development Officers. Special attention is given to recurrent cases in slums.
  - In special works such as river, tanks, nalas and storm water drains and open drains, teams identify the breeding sources and take up the edge cleaning & removal of water hyacinth. Anti larval operations are also done using larvicide and fish in the water bodies.
  - In addition to anti-larval operations, special work and fogging, special focused action is initiated on the disease hot spots and hot spots - larvae and mosquito.
  - All open larval breeding sources are identified and treated.
    - Anti-larval operations by deploying ALO units consisting of teams,
    - Thermal fogging with portable and vehicle mounted fogging machines,

- Space spray with power sprayers as and when mosquito transmitted disease case is reported.
- Indoor residual spray in and around case reported human dwelling.
- IEC on mosquitoes and diseases by pasting door stickers, distributing pamphlets, displaying posters and group meetings.

#### 4. Analysis



- Commissioners will analyze the incidence of mosquito borne diseases and entomological parameters, weekly.
- Entomological teams monitor and evaluate mosquito densities, weekly. Each team will study the larval and adult mosquito densities at 10 fixed and 10 random locations and provide feedback to ALO teams.
- The Health Officer/Sanitary Inspector /Health Assistant in the case of Municipalities/ Nagarpanchayats and Entomologist /Malaria Officer /Biologist in addition to the above officers in the case of Municipal Corporation, shall regularly visit the slum level federation meetings and town level federation meetings and explain about the anti Mosquito campaign.

#### 5. Expected improvement in processes

- Improved case detection through all sources,
- Reduction in time lag between case detection and action taken,
- Reduction of time lag in complaints redressed and feedback,
- Effective and coordinated activities of various service providers, and
- Reduction in transmission index of mosquito transmitted diseases.

#### 6. Expected outcomes

- Significant reduction in the incidence of malaria and dengue cases.
- Substantial reduction in the larval density and mosquito density on weekly basis.
- Significant reduction of complaints by public, leaders & media.
- Hot spots of diseases identified and spread of vector borne diseases contained by undertaking area specific interventions.

3. The Commissioner and Director of Municipal Administration, Hyderabad shall communicate this strategy on SIRA to all the Urban Local Bodies including Corporations for adoption to control Mosquitos and Malaria and Dengue epidemics. The Commissioner, GHMC shall also implement the SIRA program immediately. All the Urban Local Bodies in the state shall invariably follow the strategy

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

Dr.SAMEER SHARMA  
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Commissioner and Director of Municipal Administration, Hyderabad.  
The Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad.  
The Commissioner, Greater Visakhapatnam Municipal Corporation.  
The Commissioner, Vijayawada Municipal Corporation, Vijayawada.

The Commissioner, Tirupathi Municipal Corporation.  
The Mission Director, MEPMA, Hyderabad.  
The Engineer-in-Chief (Public Health), Hyderabad.  
All the Urban Local Bodies through C&DMA, Hyderabad.  
Copy to:  
The O.S.D. to Hon'ble M(MA).  
The P.S. to Principal Secretary to Government (MA).  
The P.S. to Principal Secretary to Government (UD).  
Sf/sc

//FORWARDED BY ORDER//

ASSISTANT DIRECTOR